

Notice of Allowability**Application No.**

09/830,669

Examiner

Jennifer Dunston

Applicant(s)

MARLIERE ET AL.

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERIT IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication(s) filed 12/4/2009.
2. ☒ The allowed claim(s) is/are 86-103, 106-115, 119-123, 125-132 and 135.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20100115.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/Jennifer Dunston/
Examiner, Art Unit 1636

EXAMINER'S AMENDMENT

The amendment filed 12/4/2009 under 37 CFR 1.116 in reply to the final rejection has been entered.

An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 1/15/2010, Jim Kelly requested an extension of time for 2 MONTH(S) and authorized the Director to charge Deposit Account No. 15-0030 the required fee for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

The title has been changed to the following:

Cells and method for producing proteins comprising an unconventional amino acid

In the specification:

At page 1, line 3, the following new paragraph has been inserted:

This application is a national stage entry under 35 U.S.C. § 371 of PCT international application number PCT/FR99/02628, filed 10/28/1999.

Page 25, line 10 has been amended to delete "QIAquick" and replace therefore "QIAQUICK".

Page 28, line 25 has been amended to delete "ac-aminobutyrate" and replace therefore "L-aminobutyrate".

In the claims:

98. (Currently Amended): ~~The method~~Method of claim 97, further comprising culturing the isolated cells in a second culture medium containing said amino acid encoded by said target codon.

103. (Currently Amended): An *E. coli* cell, obtainable by the method of Claim 86, wherein said cell comprises valyl-tRNA synthase including at least one mutation selected from the group consisting of K277Q, R223H, V276A and or D230N, which allows said valyl-tRNA synthase to charge compounds that show steric resemblance to valine.

107. (Currently Amended): A method of producing a protein the amino acid sequence of which comprises ~~said at least one~~unconventional amino acid, comprising culturing the isolated cell of Claim 103 under conditions to produce the protein.

108. (Currently Amended): A process for producing a protein the amino acid sequence of which comprises ~~said at least one~~ unconventional amino acid, comprising:

- (a) selecting a cell by the method according to Claim 97;
- (b) growing said cell selected in (a) in a culture medium comprising ~~said at least one~~ unconventional amino acid or a precursor thereof and under culture conditions which allow the growth of said cell, and
- (c) producing a supernatant or a cell pellet from the cell culture; and
- (d) isolating from the culture supernatant and/or from the cell pellet produced in step (c) a protein comprising said unconventional amino acid.

Claims 116-118 (Canceled).

123. (Currently Amended): The *E. coli* cell of Claim 103, wherein the compounds that show steric resemblance to valine are selected from the group consisting of cysteine, L-2-aminobutyrate, L-2-aminovalerate, L-2,3[[L-2-3]]-diaminopropionate and L-3-thiol- 2-aminobutyrate.

130. (Currently Amended): The *E. coli* cell of Claim 125, wherein the compounds that show steric resemblance to valine are selected from the group consisting of cysteine, L-2-aminobutyrate, L-2-aminovalerate, L-2,3[[L-2-3]]-diaminopropionate and L-3-thiol- 2-aminobutyrate.

Claim 135 (New): A process for producing a protein the amino acid sequence of which comprises at least one unconventional amino acid, comprising:

- (a) growing the cell of claim 125 in a culture medium comprising at least one unconventional amino acid and under culture conditions which allow the growth of said cell, wherein said unconventional amino acid is selected from the group consisting of cysteine, L-2-aminobutyrate, L-2-aminovalerate, L-2,3-diaminopropionate and L-3-thiol-2-aminobutyrate,
- (b) producing a supernatant or a cell pellet from the cell culture; and
- (c) isolating from the culture supernatant and/or from the cell pellet produced in step (b) a protein comprising said unconventional amino acid.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Dunston whose telephone number is (571)272-2916. The examiner can normally be reached on M-F, 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

Art Unit: 1636

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer Dunston/
Examiner
Art Unit 1636